

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-325707

(43)Date of publication of application : 12.11.2002

(51)Int.Cl.

A47L 9/28  
B25J 13/08

(21)Application number : 2002-005164

(71)Applicant : SAMSUNG KWANGJU  
ELECTRONICS CO LTD

(22)Date of filing : 11.01.2002

(72)Inventor : SONG JEONG-GON  
KO JANG-YOUN  
KIM KWANG-SU

(30)Priority

Priority number : 2001 200120753  
2001 200147287  
2001 200147288

Priority date : 18.04.2001  
06.08.2001  
06.08.2001

Priority country : KR

KR

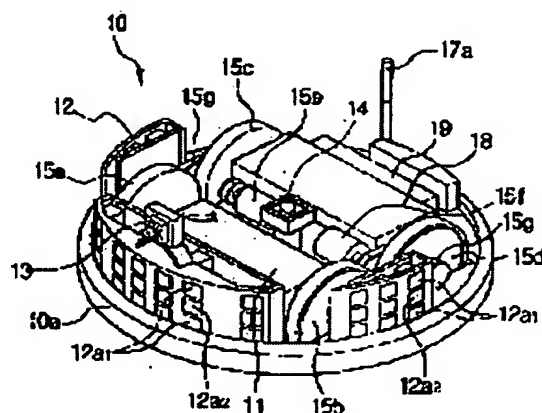
KR

## (54) ROBOT CLEANER, SYSTEM FOR IT AND METHOD FOR CONNECTION TO EXTERNAL CHARGING DEVICE

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a robot cleaner capable of performing connection by an external charging device efficiently and a method for connection to the external charging device.

**SOLUTION:** The cleaner includes driving parts 15 e, f and g for driving a plurality of rings 15a, b, c and d, a single camera 13 installed on a main body so as to pick up the image of an external environment, and a control part 18 which picks up an image by which a connecting position with the external charging device can be recognized by the camera for storing it, controls a driving part so as to move from the external charging device to a desired working place when a work instruction signal is received in the state of being connected with the external charging device and tracks the connecting position of the external charging device while comparing a present image picked up by the camera with the stored connecting position image of the charging device in the case of re-connecting by the external charging device. The robot cleaner 10 performs re-connecting to the external charging device by reducing positional recognition errors by using the charging position image of the charging device stored when being detached from the external charging device or when charging is required and an image picked up by the camera presently.



## LEGAL STATUS

[Date of request for examination] 11.01.2002  
[Date of sending the examiner's decision of rejection]  
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]  
[Date of final disposal for application]  
[Patent number]  
[Date of registration]  
[Number of appeal against examiner's decision of rejection]  
[Date of requesting appeal against examiner's decision of rejection]  
[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office